

George W. Beadle, 85, Geneticist And Nobel Prize Winner, Is Dead

By GLENN FOWLER

George W. Beadle, a geneticist who won a Nobel Prize in 1958 for discoveries that contributed one of the basic concepts of modern genetics, died of Alzheimer's disease Friday at the Mount San Antonio Gardens retirement community in Pomona, Calif. He was 85 years old.

Dr. Beadle's Nobel Prize in medicine and physiology was awarded for his work in demonstrating how genes control the basic chemistry of the living cell. At the time he was chairman of the division of biology at the California Institute of Technology. He shared the prize with Edward L. Tatum of the Rockefeller Institute and Dr. Joshua Lederberg of the University of Wisconsin, who is currently president of Rockefeller University.

Less than three years after the Nobel award, one of many he received, Dr. Beadle became the seventh president of the University of Chicago, a position he held until 1968. He taught biology at the university while he was president and as an emeritus professor until 1975. He also conducted research that clarified the origins of domestic corn. In the course of providing answers to a question long in scientific dispute, Dr. Beadle cultivated a field of corn wherever he was, including at the university campus among the streets on the South Side of Chicago.

"George Beadle was an enormously distinguished scientist of great personal qualities and quiet personal

force," Dr. Hanna Gray, president of the university, said yesterday. "He presided over a very important period of significant growth and enduring renewal."

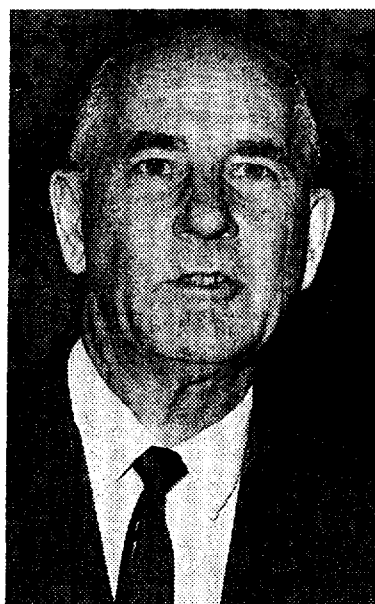
Born on Farm in Nebraska

Born on a farm near Wahoo, Neb., George Wells Beadle received bachelor's and master's degrees from the University of Nebraska and a doctorate from Cornell, where he taught and did experimental work from 1926 until 1931, when he was awarded a two-year National Research Council fellowship at the California Institute of Technology.

After serving as a guest investigator in physicochemistry at the Institute of Biology in Paris, Dr. Beadle joined the Harvard University faculty as an assistant professor of genetics. He spent 10 years as a professor of biology at Stanford University before returning to the California Institute of Technology in 1946, where he was acting dean of the faculty in his final year before going to Chicago.

His interest in genetics began while he was a student at the University of Nebraska. In the early 1940's at Stanford, he made his first contributions to the chemical methods of studying mutations in genetics, the field in which he was to become a dominant figure.

Through experiments with bread mold, which he and Dr. Tatum subjected to X-rays and ultraviolet light to



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produce mutations, they were able to demonstrate that genes transmit hereditary characteristics by controlling chemical reactions.

Their studies were cited by the Nobel Prize jury for having made understandable a variety of bewildering effects in animal and plant cells. Dr. Lederberg, their co-winner, was credited for parallel work in bacterial genetics. Taken together, the discoveries led, among other things, to vastly increased production of penicillin during World War II.

Awarded 36 Honorary Degrees

Dr. Beadle was president of the Genetics Society of America in 1946 and of the American Association for the Advancement of Science in 1955 and 1956. He was awarded 36 honorary degrees by universities in the United States and abroad. He served on the council of the National Academy of Sciences from 1969 to 1972 and was a member of the Royal Society in London and of the Danish Royal Academy of Sciences.

Among his other awards were the American Public Health Association's Lasker Award in 1950, the Albert Einstein Commemorative Award in Science in 1958, the National Award of the American Cancer Society in 1959 and the National Academy of Sciences' Kimber Genetics Award in 1960.

He was the author with Alfred H. Sturdevant of a standard work, "An Introduction to Genetics," published in 1939 and also wrote "Genetics and Modern Biology" in 1963 and with his wife, Muriel Barnett Beadle, "The Language of Life" in 1966.

Dr. Beadle is survived by his wife; a son, David, of Pasadena, Calif.; a stepson, Redmond Barnett of Tacoma, Wash.; a sister, Ruth, of Oakland, Calif., and five grandchildren.